Amendments to the Claims:

Claims 1-3 (canceled)

Claim 4 (new): A sensor, which is connectable to a network, said sensor comprising:

a sensor head;

a signal processing part that processes signals inputted from said sensor head;

a communication control part that is used by a controller for communicating with said sensor by a general-purpose access;

an interface memory area that stores an interface program used by said controller when accessing by an access routine particular to said sensor;

a load controller that uploads said interface program to said controller in response to a request from said controller; and

a configuration manager that carries out initialization of said signal processing part according to said interface program in response to an initialization request from said controller.

Claim 5 (new): The sensor of claim 4 wherein said configuration manager informs said controller when said initialization is completed and thereafter carries out ordinary sensing processes.

Claim 6 (new): The sensor of claim 4 wherein said initialization includes adjustment of parameters including threshold values for judgments.

Claim 7 (new): The sensor of claim 5 wherein said initialization includes adjustment of parameters including threshold values for judgments.

Claim 8 (new): The sensor of claim 4 wherein said initialization includes adjustment of operational data including input sampling periods and output format.

Claim 9 (new): The sensor of claim 5 wherein said initialization includes adjustment of operational data including input sampling periods and output format.

Claim 10 (new): The sensor of claim 4 wherein said interface program is created as an inherited class of interface class and defines a plurality of methods, said methods including Constructor for instantiating as a program and initializing said sensor and Call General Purpose Routine for specifying detailed commands to said sensor and parameters and receiving results of processes.

Claim 11 (new): The sensor of claim 5 wherein said interface program is created as an inherited class of interface class and defines a plurality of methods, said methods including Constructor for instantiating as a program and initializing said sensor and Call General Purpose Routine for specifying detailed commands to said sensor and parameters and receiving results of processes.